REMARKS

Claim 13 has been amended to correct a typographical error by inserting a missing semicolon (;). This amendment of claim 13 does not affect the scope of claim 13 and the Examiner's arguments regarding claim 13 are consistent with the missing semicolon being present in claim 13. Accordingly, Applicants respectfully request that the amendment of claim 13 be entered in order to place the claims in better condition for appeal.

Applicants have amended claims 13 and 17-20, and have cancelled claims 14-16 and 21-36, during prosecution of this patent application. Applicants are not conceding in this patent application that the subject matter encompassed by said amended and cancelled claims are not patentable over the art cited by the Examiner, since the claim amendments and cancellations are only for facilitating expeditious prosecution of this patent application. Applicants respectfully reserve the right to pursue the subject matter encompassed by said amended and cancelled claims, and to pursue other claims, in one or more continuations and/or divisional patent applications.

The Examiner rejected claims 13 and 17-20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Airy et al. (U.S. Patent Application Publication No. 2002/0142780, hereinafter Airy), in view of Payne et al. (U.S. Patent No. 6,021,433, hereinafter Payne), Masseroni et al. (U.S. Patent Application Publication No. 2003/0054850, hereinafter Masseroni), Batson (U.S. Patent No. 5,844,327), Anderson II et al. (U.S. Patent No. 5,909,544, hereinafter Anderson), and Chefalas et al. (U.S. Application Publication No. 2002/0138786, hereinafter Chefalas).

The Examiner rejected claims 18 and 20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combination of Airy, Payne, Masseroni, Batson and Chefalas (hereinafter

Airy et al.), as applied to claim 13 above, in further view of Eshet et al. (US. Patent No.

6,674,804, hereinafter Eshet).

Applicants respectfully traverse the § 103 rejections with the following arguments.

35 U.S.C. § 103: Claims 13 and 17-20

The Examiner rejected claims 13 and 17-20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Airy et al. (U.S. Patent Application Publication No. 2002/0142780, hereinafter Airy), in view of Payne et al. (U.S. Patent No. 6,021,433, hereinafter Payne), Masseroni et al. (U.S. Patent Application Publication No. 2003/0054850, hereinafter Masseroni), Batson (U.S. Patent No. 5,844,327), Anderson II et al. (U.S. Patent No. 5,909,544, hereinafter Anderson), and Chefalas et al. (U.S. Application Publication No. 2002/0138786, hereinafter Chefalas).

Applicants respectfully contend that claim 13 is not unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas because Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas does not teach or suggest each and every feature of claim 13.

A first example of why claim 13 is not unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas is that Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas does not teach or suggest the feature: "estimating, by the server, a corresponding future data transfer size of the data actually stored in the first device, said estimating being based on a historic data transfer size for data previously transferred from the first device to the server over the network".

The Examiner argues: "Airy discloses ... estimating, by the server, a corresponding future data transfer size of the data actually stored in the first device (paragraph [0053], lines 1-3), said estimating being based on a historic data transfer size for data previously transferred from the first device to the server over the network (paragraph [0010], lines 20-22, *influences future schedules;* paragraph [0069], lines 4-7)".

In response, Applicants acknowledge that the Examiner is correct in stating that Airy, Par. [0053], lines 1-3 discloses "estimating, by the server, a corresponding future data transfer size of the data actually stored in the first device".

However, Airy, Par. [0053], lines 1-3 also discloses that the estimate of the corresponding future data transfer size of the data actually stored in the first device is based on a received Data Transmission Queue Size. Airy, Par. [0052], lines 1-5 discloses that said Data Transmission Queue Size was received in a Request to Send (RQS) signal sent by a subscriber unit, which is not a disclosure of the estimate being based on "a historic data transfer size for data previously transferred from the first device to the server over the network" as claimed.

Airy, Pars. [0055]-[0056] discloses that the estimate may alternatively be based on information encoded within data units transmitted data blocks, said encoded information reflecting the current data transmission queue value of the subscriber unit, which is not a disclosure of the estimate being based on "a historic data transfer size for data previously transferred from the first device to the server over the network" as claimed.

The Examiner's reliance on Airy, Par. [0010], lines 20-22 is misplaced, because Airy, Par. [0010], lines 20-22 recites: "The base user queue size estimate influences future schedules generated by the base transceiver station", which is a disclosure of how the estimate is used, but is not a disclosure of what the estimate is based on.

The Examiner's reliance on Airy, Par. [0069], lines 4-7 is misplaced, because Airy, Par. [0069], lines 4-7 recites: "From the decoded range, the base transceiver station must estimate how many data blocks to include within subsequent schedules", which is a disclosure of the necessity of making the estimate, but is not a disclosure of what the estimate is based on.

Therefore, the Examiner has not established a *prima facie* case of obviousness in relation to claim 13.

A second example of why claim 13 is not unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas is that Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas does not teach or suggest the feature: "said schedule currently being based on the historic data transfer size for the first device" in conjunction with "a historic data transfer size for data previously transferred from the first device to the server over the network "..

The Examiner argues: "Airy discloses ...said schedule currently being based on the historic data transfer size for the first device (paragraph [0010], lines 20-22, *influences future schedules*)".

In response, Applicants cite Airy, Par. [0010], lines 20-22 recites: "The base user queue size estimate influences future schedules generated by the base transceiver station". As discussed *supra* in the first example, the base user queue size estimate is an estimate of a future data transfer size of the data actually stored in the first device. Thus, the preceding argument by the Examiner is asserting that in Airy the current schedule is based on an estimate of a future data transfer size of the data actually stored in the first device and thus not based on the historic data transfer size for data previously transferred from the first device to the server over the network as claimed.

Therefore, the Examiner has not established a *prima facie* case of obviousness in relation to claim 13.

A third example of why claim 13 is not unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas is that Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas does not teach or suggest the feature: "determining, by the server, that a difference exists between the actual data transfer size and the corresponding estimated future data transfer size".

The Examiner has not addressed the preceding feature of claim 13.

Therefore, the Examiner has not established a *prima facie* case of obviousness in relation to claim 13.

A fourth example of why claim 13 is not unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas is that Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas does not teach or suggest the feature: ***"responsive to said determining that said difference exists***, changing an existing data transfer period for the first device in the schedule in a way that minimizes change to the schedule" (emphasis added).

The Examiner argues: "Airy discloses ... responsive to said determining that said difference exists (paragraph [0050], lines 3-8), changing an existing data transfer period for the first device in the schedule (paragraph [0057], lines 6-9, *influencing subsequent transmission scheduling)* in a way that minimizes change to the schedule (paragraph [0008], lines 4-8, *minimizing the management of the transmission scheduling)*".

In response, Applicants acknowledge that Airy, Par. [0057], lines 6-9 discloses "changing an existing data transfer period for the first device in the schedule in a way that minimizes change to the schedule".

However, Airy, Par. [0050], lines 3-8 does not disclose that the claimed "changing an existing data transfer period ..." is "responsive to said determining that said difference exists". Applicants respectfully contend that Airy, Par. [0050], lines 3-8 does not mention anything about "changing an existing data transfer period ..." and therefore does not disclose that said "changing an existing data transfer period ..." is "responsive to said determining that said difference exists".

In other words, there is no disclosure of anything in Airy that links "changing an existing data transfer period for the first device in the schedule in a way that minimizes change to the schedule" with "said determining that said difference exists", wherein said difference is recited in claim 13 to be "a difference exists between the actual data transfer size and the corresponding estimated future data transfer size".

Therefore, the Examiner has not established a *prima facie* case of obviousness in relation to claim 13.

A fifth example of why claim 13 is not unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas is that Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas does not teach or suggest the feature: "keeping track, by the server, of an off-line device of the plurality of devices that is off-line and informing the off-line device of the off-line device's schedule for *transferring data from the off-line device to the server* as soon as the off-line device becomes on-line" (emphasis added).

The Examiner argues that Payne, col. 11, lines 56-60 discloses the preceding feature of claim 13.

In response, Applicants cite Payne, col. 11, lines 56-60 which recites: "The information sources 12 thus provide the information basis for outgoing broadcast transmitted by the central

broadcast server 34 through nationwide wireless broadcast network immediately or on a scheduled basis to both on- and off-line computers 14."

Applicants assert that the preceding quote from Payne, col. 11, lines 56-60 relates to data transfer from the server to the off-line device. In contrast, the preceding feature of claim 13 relates to data transfer from the off-line device to the server.

Therefore, the Examiner has not established a *prima facie* case of obviousness in relation to claim 13.

A sixth example of why claim 13 is not unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas is that Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas does not teach or suggest the feature: "receiving, by the server, information relating to GSM radio reception power over time by a another device of the plurality of devices and *estimating ... times unsuitable for the another device to be connected to the server*".

The Examiner argues: "Airy discloses ... receiving, by the server, information relating to reception power over time by a another device of the plurality of devices (paragraph [0013]; paragraph [0098]; paragraph [0103], lines 4-6) and estimating, by the server based on the received information relating to the power, times unsuitable for the another device to be connected to the server (paragraph [0096]; paragraph [0103])".

In response, Applicants respectfully contend that Airy, Pars. [0096] and [00103] is totally silent as to "estimating ... times unsuitable for the another device to be connected to the server".

Therefore, the Examiner has not established a *prima facie* case of obviousness in relation to claim 13.

A sixth example of why claim 13 is not unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas is that Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas does not teach or suggest the feature: "said server forecasting a bandwidth of the network by monitoring current download activity from data transfers between the network and said server".

The Examiner argues: "Airy discloses ... said server forecasting a bandwidth of the network (paragraph [0104], lines 2-5) by monitoring current download activity from data transfers between the network and said server (paragraph [0104], lines 5-12)".

In response, Applicants respectfully contend that Airy, Par. [104] recites: "An embodiment of the scheduler includes the scheduler taking into consideration constraints on the frequency bandwidth on either the up link or the down link transmission. The frequency bandwidth allocations can be adjusted by varying the number of frequency blocks within a time slot. The frequency bandwidth allocated to a subscriber can be limited due to signal to noise issues, or the Federal Communication Committee (FCC) limitations. The scheduler can account for these limitations though allocations of frequency bandwidth through the scheduling."

Thus, Airy, Par. [104] discloses adjusting the frequency bandwidth by varying the number of frequency blocks within a time slot, which is not a disclosure of "forecasting a bandwidth of the network by monitoring current download activity from data transfers between the network and said server" as claimed.

Thus, Airy, Par. [104] discloses limiting the frequency bandwidth allocated to a subscriber due to signal to noise issues of FCC limitations, which is not a disclosure of "forecasting a bandwidth of the network by monitoring current download activity from data transfers between the network and said server" as claimed.

Thus, Airy, Par. [104] discloses allocating frequency bandwidth through the scheduling to account for said limiting the frequency bandwidth, which is not a disclosure of "forecasting a bandwidth of the network by monitoring current download activity from data transfers between the network and said server" as claimed.

Therefore, the Examiner has not established a *prima facie* case of obviousness in relation to claim 13.

A seventh example of why claim 13 is not unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas is that Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas does not teach or suggest the feature: "revising the schedule to achieve data transfer from the plurality of devices to the server at 80% of the forecasted bandwidth".

The Examiner argues that Batson, col. 9, lines 56-59 discloses the preceding feature of claim 13.

In response, Applicants cite Batson, col. 9, lines 56-59 which recites: "In the worst case, for a scan of the critical status 92 for each active inverter 36M, scheduler 110 schedules approximately 80% of the network bandwidth", which is totally unrelated to "revising the schedule to achieve data transfer from the plurality of devices to the server at 80% of the forecasted bandwidth" as claimed.

Therefore, the Examiner has not established a *prima facie* case of obviousness in relation to claim 13.

A eighth example of why claim 13 is not unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas is that Airy in view of Payne, Masseroni, Batson,

Anderson and Chefalas does not teach or suggest the feature: "changing, by the server, the schedule in response to detecting that a device of the plurality of devices has run out of memory".

The Examiner argues that Anderson, col. 4, lines 22-30 discloses the preceding feature of claim 13.

In response, Applicants cite Anderson, col. 4, lines 22-30 which recites: "It is an object of the invention to provide a system for tracking and scheduling of available resource computers connected in a network, including monitoring such parameters as, for example, the location, name, operating system, memory, speed, processor characteristics, memory capacity and other operational characteristics, of each resource computer, and using that information to allocate those resource computers to run applications, such as for example, test applications and collect data, such as test data."

Applicants assert that the preceding quote from Anderson, col. 4, lines 22-30 discloses scheduling available resources which includes monitoring memory capacity. However, preceding quote from Anderson, col. 4, lines 22-30 does not disclose "changing... the schedule in response to detecting that a device ... has run out of memory" as claimed.

Therefore, the Examiner has not established a *prima facie* case of obviousness in relation to claim 13

A ninth example of why claim 13 is not unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas is that Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas does not teach or suggest the feature: "determining, by the server, *when* to upload new software from the server to the plurality of devices, taking into account a reduction

in an effective communications bandwidth, said reduction resulting from the data transferred

from the plurality of devices to the server"(emphasis added).

The Examiner argues that "Chefalas discloses determining, by the server, when to upload

new software from the server to the plurality of devices (paragraph [0034], lines 7-12), taking

into account a reduction in an effective communications bandwidth, said reduction resulting from

the data transferred from the plurality of devices to the server (paragraph [0034], lines 32-40)."

In response, Applicants respectfully contend that Anderson, col. 4, lines 7-12 and 22-30

discloses alternatively delivering a software product to a user by shipping the software product to

the user instead of electronically delivering the software product to the user if the software

product is to large for the bandwidth required for electronic delivery. However, Anderson, col. 4,

lines 7-12 and 22-30 is totally silent as to *when* to delivering the software product to the user and

therefore does not disclose the preceding feature of claim 13.

Therefore, the Examiner has not established a *prima facie* case of obviousness in relation

to claim 13

Based on the preceding arguments, Applicants respectfully maintain that claim 13 is not

unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas, and that

claim 13 is in condition for allowance. Since claims 17-20 depend from claim 13, Applicants

contend that claims 17-20 are likewise in condition for allowance.

35 U.S.C. § 103: Claims 18 and 20

The Examiner rejected claims 18 and 20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over the combination of Airy, Payne, Masseroni, Batson and Chefalas (hereinafter Airy et al.), as applied to claim 13 above, in further view of Eshet et al. (US. Patent No. 6,674,804, hereinafter Eshet).

Since claims 18 and 20 depend from claim 13, which Applicants have argued *supra* to not be unpatentable over Airy in view of Payne, Masseroni, Batson, Anderson and Chefalas under 35 U.S.C. §102(e), Applicants maintain that claims 18-20 are likewise not unpatentable over Airy, Payne, Masseroni, Batson, Anderson and Chefalas, and further in view of Eshet under 35 U.S.C. §103(a).

CONCLUSION

Based on the preceding arguments, Applicants respectfully believe that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicants invites the Examiner to contact Applicants' representative at the telephone number listed below. The Director is hereby authorized to charge and/or credit Deposit Account 09-0457 (IBM).

Date: 12/19/2008

Jack P. Friedman
Jack P. Friedman
Registration No. 44,688

Customer No. 30449
Schmeiser, Olsen & Watts
22 Century Hill Drive – Suite 302
Latham, New York 12110
(518) 220-1850 Telephone
(518) 220-1857 Facsimile
E-mail: jfriedman@iplawusa.com